

PLANT PATENT

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APPLICATION FOR UNITED STATES PLANT PATENT

for

CHRYSANTHEMUM PLANT NAMED 'STEREOPHONICS'

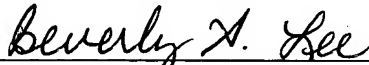
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This application claims the benefit of U.S. Provisional Application No. 60/396,825, filed July 17, 2002.

LATIN NAME OF THE GENUS AND SPECIES

Botanical classification: *Dendranthema grandiflora*.

5

VARIETY DENOMINATION

The new Chrysanthemum variety denomination is 'Stereophonics.'

BACKGROUND OF THE INVENTION

The present invention comprises a new and distinct cultivar of Chrysanthemum botanically known as *Dendranthema grandiflora*, and referred to by
10 the cultivar name 'Stereophonics'. 'Stereophonics', identified as 21214-0 originated from a cross made in a controlled breeding program in Chichester, West Sussex, United Kingdom. The female parent of the new variety is an undistributed, unpatented seedling identified as a white single. The male parent of the new variety is an undistributed, unpatented seedling identified as a white single. The new variety
15 'Stereophonics' has been asexually reproduced by vegetative cuttings in Chichester, West Sussex, United Kingdom and the distinguishing characteristics are retained through successive generations of asexual reproduction.

BRIEF SUMMARY OF THE INVENTION

'Stereophonics' is a pot type of Chrysanthemum plant variety having large white
20 spatulate single flowers.

Comparison with Parent

Plants of the new Chrysanthemum variety 'Stereophonics' are similar to the white single unpatented seedling, parent cultivar in plant habitat and growth rate. In side-by-side comparisons in Chichester, West Sussex, United Kingdom, under
25 commercial practice, plants of the new Chrysanthemum variety 'Stereophonics'

compared to plants of a white single unpatented seedling, the parent cultivar, in the following characteristics.

1. The new variety 'Stereophonics' produces large white spatulate single flowers whereas the parent cultivar 'a white single unpatented seedling' produces large white broad flat single flowers.
2. Plants of the new variety 'Stereophonics' have larger and taller inflorescence than plants of the parent cultivar 'Stereophonics'.

Comparison with Other Varieties

Plants of the new Chrysanthemum variety 'Stereophonics' are similar to the cultivar 'Cool Time' (U.S. Plant Patent Application Ser. No. 09/802051) in plant habitat and growth rate. However, in side-by-side comparisons in Chichester, West Sussex, United Kingdom, under commercial practice, plants of the new Chrysanthemum variety 'Stereophonics' differed from plants of the cultivar 'Cool Time' in the following characteristics.

1. The new variety 'Stereophonics' produces white spatulate single flowers whereas the cultivar 'Cool Time' produces white broad flat single flowers.
2. Plants of the new variety 'Stereophonics' have larger and taller inflorescence than plants of the cultivar 'Cool Time'.

BRIEF DESCRIPTION OF ILLUSTRATIONS

Typical specimens of the plant and flowers for the new Chrysanthemum variety 'Stereophonics' are shown in the accompanying digital photograph. The colors shown are as true as possible within the usual limits of this kind of illustration. Figure 1 is a whole plant view of the new variety 'Stereophonics' grown in a pot. The plant shown in the illustration and described here is 52 days after the commencement of Short Days.

DETAILED BOTANICAL DESCRIPTION

The following description of the new Chrysanthemum variety 'Stereophonics' is of plants grown in a greenhouse in Chichester, West Sussex, United Kingdom in the

month of February. The cultivar has not been observed under all possible environmental conditions. The phenotype may vary significantly with variations in the environment such as temperature, length of day and light intensity, without any variance in genotype. The commercial classification of the new variety is a pot

5 Chrysanthemum.

Plants of the new variety have been grown successfully under temperature conditions averaging about 18°C at night and about 24°C to 25°C during the day under light conditions of about 5000 to 6000 foot candles. The plants respond well to the use of growth retardant, such as B9 treatment. To produce a commercial product
10 the plants may be pinched once with the center bud removed. The typical container size for commercial growth is 14 cm. It has been observed that the shelf life of the new variety is about 24 days with a response time of about 7 weeks. The new variety is suitable for growth in a temperature range of 17°C to 28°C

The following description is with respect to a plant produced as a pot
15 Chrysanthemum. In the description of this new Chrysanthemum variety, color values have been taken from the Royal Horticultural Society Colour Chart (R.H.S.C.C.).

Plant

Plant type: Pot

Habit: Upright and free branching

20 Height: 24 cm

Width: 36 cm

Branching characteristics: Upright and free branching

Length of Lateral Branches: 5-12 cm

Number of Breaks from Pinch: 3-5

25 Stem Color: 137C

Response Time: 50 days

Vigor: Medium / Tall

Shelf Life: 24 days

Disease/Pest (Susceptibility/Resistance observed): None observed to date

Growth retardant type and treatment: 3 applications of 2.5 gm/litre B9 @ 2, 21 and 28 days after sticking of unrooted cuttings.

The plants were grown for 3 weeks in Long Day conditions (20 hours of light) and then transferred to Short Day conditions (13 hours of dark).

5 Propagation:

Type: Vegetative Propagation Via Stem Cuttings

Time to rooting: 12-14 days with soil temperatures of 18°C

Rooting habit: Fine and Fibrous

Other treatments or conditions: none

10 Foliage

Number of Leaves Per Lateral Branch: 8-11

Compound or single: Single

Arrangement of Leaves: Alternate

Shape of Leaf: Typically 5 Lobed Ovate

15 Size of Leaf: *Width (cm):* 2-5 *Length (cm):* 2-8

Leaf Apex: Acute

Base: Obtuse

Attachment: Petioled

Aspect: Slightly undulating

20 Margin: Palmetely lobed

Surface characteristics: *Top:* Slightly pubescent

Bottom: Pubescent

Petiole: *Color:* 137C

Length: 2 cm

25 Venation: net prominent mid vein at underside

Color: upper side: Near 139C

under side: Near 139C

Color: Mature Leaf, *upper side:* Near 147A; *under side:* Near 147B

Young Leaf, *upper side:* Near 147A; *under side:* Near 138C

Flower

- Flower appearance: Matte
- 5 Flower type: Single
- Flower form: Cupped
- Flower shape: Circular
- Flower habit: Domed Capitulum
- Number of blossoms per branch: 3-5
- 10 Inflorescence form: Cyme
- Depth of fully expanded blossoms: 2 cm
- Diameter of fully expanded blossoms: 9 cm
- Sepals:
- 15 *Number:* 23-30
- Outer Color:* Near 137C
- Length:* 0.5-0.9 cm
- Width:* 0.2-0.5 cm
- Texture/Appearance:* Pubescent
- Peduncle: Peduncle length is shortest at the terminal flower and progressively longer
- 20 moving down the stem.
- Length:* 3-10 cm, average 4 cm
- Color:* Near 137A
- Surface:* Pubescent
- Habit:* Slightly Curving
- 25 *Strength:* Medium
- Pedicel: *Length:* terminal: 2-5 cm; lateral: 5-7 cm
- Color:* Near 138A
- Surface:* Pubescent
- Habit:* Slightly Curving
- 30 *Strength:* Medium
- Ray Florets:
- Form/Shape:* Spatulate
- Texture/Appearance:* Matte

5 *Number per flower:* 35-45
 Length: 3-4.5 cm; *Width:* 0.5-1 cm
 Apex: Rounded
 Base: Tubular
 Margin: Entire

Disc florets:

10 *Form/Shape:* Cylindrical
 Texture/Appearance: Shiny
 Number per flower: 150-250
 Length: 0.6 cm; *Width:* 0.1 cm
 Diameter of disc: 2 cm

Fragrance: None

Flower Bud (at onset of color):

15 *Length:* 0.5 cm
 Diameter: 1 cm
 Form/shape: Globular

General flower color:

1. Ray florets, *upper side*:
 Immature: Near 158A
 Mature: Near 155D
 Older/Fading: Near 155D
2. Ray florets, *under side*:
 Immature: Near 158B
 Mature: Near 155B
 Older/Fading: Near 155D
3. Disc florets:
 Immature: Near 137D
 Mature: Near 144B
 Older/Fading: Near 151C
4. Bud: 158B

Flower progression with age: Flower form does not change and there is very little color fading.

Reproductive Organs

Ray Florets: Pistillate

- 5 *Pistil Number:* >30
 Stigma color: Near 6A
 Stigma shape: Forked
 Style Color: Near 145A
 Style Length: 0.6 cm

10 Disc Florets: Pistillate

- Pistil Number:* >30
 Stigma color: Near 6A
 Stigma shape: Forked
15 *Style Color:* Near 145A
 Style Length: 0.5 cm

 Staminate: None observed to date

20 Fruit and Seeds: None observed to date